Abstract:

Due to the growing acceptance of patients for the use of dental implants, today the use of dental implants to replace missing natural teeth is a standard treatment option with well-developed components. Achieving beauty in an implant depends on three factors: the proper position of the implant, the amount of bone on the buccal surface of the implant, and the condition of the soft tissue around the implant. Today's knowledge states that maintaining the health of soft tissue in the maintenance and long-term success of implants is as important as osteointegration and the presence of sufficient bone around the implant. Based on gingival biotypes.

Materials & Methods: In this study, 48 single-unit implants from a private office center, one year after implant placement, were selected for this study, and then the gingival biotype status was evaluated using the Transplant Probe Transplantation (TRAN) method. If the probe was seen from beyond the gums, the patient's biotype was considered Thin, and if the probe was not observed, the patient's gingival biotype was considered Thick. Then we divided the patients into two groups of patients with Thin gingival type and patients with Thick gingival biotype. After classifying the patients, the periodontal status around the posterior dental implants was evaluated for BOP, PPD, GI in each of the Thin and Thick gingival biotype groups, and then the extent of bone resorption around the implant (Bone Loss) using radiography. Parallel PA, we measured the rate of bone resorption from the implant platform to the site of the first implant-bone contact by using Remexis radiology software and We examined hard tissue, soft tissue and periodontal tissue of patients in both groups by using T-test and Chi-Square test.

Results: In terms of statistical comparison, the relationship between gingival biotype and bone loss (Bone Loss), BOP, PPD, GI was significant, while the relationship between gingival biotype and PI was not significant.

Conclusion: Hard tissue condition, soft tissue around implants with Thick biotype is better than Thin.

Keywords: Dental Implant, Gingival Biotype, Peri-implant Soft and Hard tissue